

WE CLAIM AS OUR INVENTION:

1. A patient gurney comprising:

a chassis;

a support component on said chassis, said support component having a positive fit mechanism adapted to interact with a patient support board adapted for placement on said support component to prevent lateral motion of said patient support board, said positive fit mechanism being releasable to allow removal of said patient support board by a patient support arrangement of a medical device; and

said support component and said positive fit mechanism being automatically variably configurable to receive and engage any of a plurality of types of patient support boards, each having a head end and an underside, and differing from each other as to at least one of a shape of the underside and a width of the head end.

2. A patient gurney as claimed in claim 1 wherein said support component and said positive fit mechanism are automatically variably configurable, dependent on a patient support board placed thereon, to present a different contact surface, adapted to produce a positive fit with the type of patient support boards placed thereon, that is different for each of said types of patient support board.

3. A patient gurney as claimed in claim 1 wherein said support component comprises a movably mounted part that is adjustable as to at least one of position and alignment, so as to assume a first position for making a positive fit with a first of said different types of patient support boards, and to assume a second position to accept another of said type of patient support boards.

4. A patient gurney as claimed in claim 3 comprising a sensor device adapted to interact with a patient support board placed on said support component to recognize which of said type of patient support boards is placed on the support component, said sensor device retracting the movably mounted part if said sensor recognizes that the type of the patient support board placed on the support component does not require said movably mounted part for acceptance thereof.

5. A patient gurney as claimed in claim 1 wherein one of said types of said patient support boards has a narrow width at said head end, and wherein said positive fit mechanism comprises two guiding jaws that are each retractable into the support component, said guiding jaws being spaced from each other adapted to the narrow width.

6. A patient gurney as claimed in claim 5 comprising a sensor device adapted to interact with a patient support board placed on said support component to recognize which of said types of patient support boards is placed on the support component, said sensor device releasing the guiding jaws if said sensor recognizes that the type of the patient support board placed on the support component does not require said guiding jaws for producing said positive fit.

7. A patient gurney as claimed in claim 5 wherein each of said guiding jaws has a side adapted to face said head end of said one of said types of said patient support boards having a narrow width at the head end, and wherein each of said sides of said guiding jaws has a shape adapted to conform to a side surface of the one of said types of said patient support boards having a narrow width at the head end.

8. A patient gurney as claimed in claim 5 wherein one of said types of said patient support boards is a patient support board with a curved underside, and wherein said support component has a recess having at least one of a width and a shape conforming to the curved underside.

9. A patient gurney as claimed in claim 8 wherein said support component comprises a base part adapted to support said one of said types of said patient support boards having a narrow width at the head end, said base part being retractable into said support component to free said recess for accepting said curved underside.

10. A patient gurney as claimed in claim 9 comprising a sensor device adapted to be actuated by a patient support board placed on said support component to identify which of said types of patient support boards is placed on the support component, said sensor device, upon recognizing said type as being a patient support board with a curved underside, automatically causing retraction of said base part to free said recess.

11. A patient gurney as claimed in claim 9 wherein one of said types of said patient support boards is a universal patient support board and wherein said support component has a depression therein adapted as to at least one of width and shape to conform to said universal patient support board.

12. A patient gurney as claimed in claim 11 wherein said depression has a depth that is smaller than a depth of said recess, and a width that is larger than a width of said recess.

13. A patient gurney as claimed in claim 1 wherein one of said types of said patient support boards is a patient support board with a curved underside, and wherein said support component has a recess having at least one of a width and a shape conforming to the curved underside.

14. A patient gurney as claimed in claim 1 wherein one of said types of said patient support boards is a universal patient support board and wherein said support component has a depression therein adapted as to at least one of width and shape to conform to said universal patient support board.

15. A patient gurney as claimed in claim 1 comprising a sensor device adapted to interact with a patient support board placed on the support component to recognize which of said types of patient support boards is placed on the support component, said sensor device automatically causing said support component and said positive fit mechanism to be configured to receive the patient support board placed on the support component.

16. A patient gurney as claimed in claim 15 wherein said sensor device interacts with the patient support board placed on the support component by mechanical contact with the patient support board placed on the support component, said mechanical contact actuating said sensor device.

17. A patient gurney as claimed in claim 16 wherein said chassis is adapted for placement on a floor, and wherein each of the types of said patient support boards has a lower edge, and wherein said sensor device comprises a sensor that is deflected a variable distance dependent on a height above the floor of the lower edge of a patient support board placed on the support component.

18. A patient gurney as claimed in claim 1 wherein said support component is mounted to said chassis so as to be adjustable in height.

19. A patient gurney as claimed in claim 18 further comprising a motor in driving engagement with said support component to adjust the height of said support component.

20. A patient gurney as claimed in claim 19 further comprising a storage device in which a plurality of different heights of said support component are stored, and an input device connected to said storage device allowing input of a selected one of said different position heights, to automatically cause said motor to adjust the height of the support component to the selected one of said position heights.

21. A patient gurney system comprising:

a plurality of different types of patient support boards each having a head end and an underside, and differing from each other as to at least one of a shape of the underside and a width of the head end;

a chassis;

a support component on said chassis, said support component having a positive fit mechanism adapted to interact with a patient support board placed on said support component to prevent lateral motion of said patient support board, said positive fit mechanism being releasable to allow removal of said patient support board by a patient support arrangement of a medical device; and

said support component and said positive fit mechanism being automatically variably configurable to receive and engage any of the plurality of the patient support boards.

22. A patient gurney system as claimed in claim 21 wherein said support component and said positive fit mechanism are automatically variably configurable, dependent on a patient support board placed thereon, to present a different contact

surface, adapted to produce a positive fit with the types of said patient support boards placed thereon, that is different for each of said types of patient support board.

23. A patient gurney system as claimed in claim 21 wherein said support component comprises a movably mounted part that is adjustable as to at least one of position and alignment, so as to assume a first position for making a positive fit with a first of said different types of patient support boards, and to assume a second position to accept another of said types of patient support boards.

24. A patient gurney system as claimed in claim 23 comprising a sensor device adapted to interact with a patient support board placed on said support component to recognize which of said types of the patient support boards is placed on the support component, said sensor device retracting the movably mounted part if said sensor recognizes that the type of the patient support board placed on the support component does not require said movably mounted part for acceptance thereof.

25. A patient gurney system as claimed in claim 21 wherein one of said types of patient support boards has a narrow width at said head end, and wherein said positive fit mechanism comprises two guiding jaws that are each retractable into the support component, said guiding jaws being spaced from each other adapted to the narrow width.

26. A patient gurney system as claimed in claim 25 comprising a sensor device adapted to interact with a patient support board placed on said support component to recognize which of said types of patient support boards is placed on the support component, said sensor device releasing the guiding jaws if said sensor

recognizes that the type of the patient support board placed on the support component does not require said guiding jaws for producing said positive fit.

27. A patient gurney system as claimed in claim 25 wherein each of said guiding jaws has a side adapted to face said head end of said one of said types of said patient support boards having a narrow width at the head end, and wherein each of said sides of said guiding jaws has a shape adapted to conform to a side surface of said one of said types of said patient support boards having a narrow width at the head end.

28. A patient gurney system as claimed in claim 25 wherein one of said types of said patient support boards is a patient support board with a curved underside, and wherein said support component has a recess having at least one of a width and a shape conforming to the curved underside.

29. A patient gurney system as claimed in claim 28 wherein said support component comprises a base part adapted to support said one of said types of said patient support boards having a narrow width at the head end, said base part being retractable into said support component to free said recess for accepting said curved underside.

30. A patient gurney system as claimed in claim 29 comprising a sensor device adapted to be actuated by a patient support board placed on said support component to identify which of said type of patient support board placed on the support component, said sensor device, upon recognizing said type as being a patient support board with a curved underside, automatically causing retraction of said base part to free said recess.

31. A patient gurney system as claimed in claim 29 wherein one of said types of said patient support boards is a universal patient support board and wherein said support component has a depression therein adapted as to at least one of width and shape to conform to said universal patient support board.

32. A patient gurney system as claimed in claim 31 wherein said depression has a depth that is smaller than a depth of said recess, and a width that is larger than a width of said recess.

33. A patient gurney system as claimed in claim 21 wherein one of said types of said patient support boards is a patient support board with a curved underside, and wherein said support component has a recess having at least one of a width and a shape conforming to the curved underside.

34. A patient gurney system as claimed in claim 21 wherein one of said types of said patient support boards is a universal patient support board and wherein said support component has a depression therein adapted as to at least one of width and shape to conform to said universal patient support board.

35. A patient gurney system as claimed in claim 21 comprising a sensor device adapted to interact with a patient support board placed on the support component to recognize which of said types of patient support boards is placed on the support component, said sensor device automatically causing said support component and said press fit mechanism to be configured to receive the patient support board placed on the support component.

36. A patient gurney system as claimed in claim 35 wherein said sensor device interacts with the patient support board placed on the support component by mechanical contact with the patient support board placed on the support component, said mechanical contact actuating said sensor device.

37. A patient gurney system as claimed in claim 36 wherein said chassis is adapted for placement on a floor, and wherein each of said types of said patient support boards has a lower edge, and wherein said sensor device comprises a sensor that is deflected a variable distance dependent on a height above the floor of the lower edge of the patient support board placed on the support component.

38. A patient gurney system as claimed in claim 21 wherein said support component is mounted to said chassis so as to be adjustable in height.

39. A patient gurney system as claimed in claim 38 further comprising a motor in driving engagement with said support component to adjust the height of said support component.

40. A patient gurney system as claimed in claim 39 further comprising a storage device in which a plurality of different heights of said support component are stored, and an input device connected to said storage device allowing input of a selected one of said different position heights, to automatically cause said motor to adjust the height of the support component to the selected one of said position heights.

41. A patient gurney system as claimed in claim 21 wherein at least one of said types of said patient support boards has at least a region that is transparent to x-rays.